CATALOG DOCUMENTATION
REGIONAL EMAP DATABASE
1998 NEW YORK/NEW JERSEY HARBOR SYSTEM
VERTICAL PROFILE SURFACE AND BOTTOM DATA

TABLE OF CONTENTS

1. DATA SET IDENTIFICATION

1.1 Title of Catalog document

Regional EMAP Database
1998 New York/New Jersey Harbor System
Vertical Profile Surface and Bottom Data

1.2 Author of the Catalog entry

Melissa Hughes, Computer Sciences Corporation

1.3 Catalog revision date

18 May 2004

1.4 Data set names

Water Quality Surface Data (ctd_surf.txt)
Water Quality Bottom Data (ctd_bot.txt)

1.5 Task Group

Regional Environmental Monitoring and Assessment Program

1.6 Data set identification code

231

1.7 Version

001

1.8 Requested Acknowledgment

If you plan to publish these data in any way, EPA requires a standard statement for work it has supported:
"Although the data described in this article have been funded wholly or in part by the U. S. Environmental Protection Agency through its EMAP-Estuaries Program, it has not been subjected to Agency review, and therefore does not necessarily reflect the views of the Agency and no official endorsement should be inferred."

2. INVESTIGATOR INFORMATION

2.1 Principal Investigator

Ms. Darvene A. Adams
U.S. Environmental Protection Agency - Region II

2.2. Investigation Participant

Ms. Sandi Benyi
U.S. Environmental Protection Agency - ORD/NHEERL/AED

3. DATA SET ABSTRACT

3.1 Abstract of the Data Set

The Vertical Profile Surface and Bottom data set provides summary data from a vertical profile taken at a site. Surface and bottom data for temperature, salinity and dissolved oxygen were are reported, as well as secchi depth.

3.2 Keywords for the Data Set

temperature, salinity, dissolved oxygen, surface data, bottom data, secchi depth

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

The project was designed to support resource management decisions related to pollution control and remediation throughout the New York/New Jersey (NY/NJ) Harbor and to assist the New York-New Jersey Harbor Estuary Program (HEP) in developing a contaminant monitoring strategy to be included in the Comprehensive Conservation and Management Plan (CCMP) for the NY/NJ Harbor system.

4.2 Data Set Objective

To provide accurate physical data for the surface and bottom waters in the NY/NJ harbor region.

4.3 Data Set Background Discussion

The New York/New Jersey Harbor System Sediment Assessment was based on methods used in the EMAP-Estuaries program. Measurements of physical characteristics provide basic information about the environmental setting of a sample site. Knowledge of the physical context in which biological and chemical data are collected is important for interpreting

results accurately because physical characteristics of the environment determine the distribution and species composition of estuarine communities, particularly assemblages of benthic macroinvertebrates.

4.4 Summary of Data Set Parameters

Surface, bottom and ambient values were recorded at the time of the visit.

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition

5.1.1 Sampling Objective

To collect high-quality vertical water column profiles to characterize the physical conditions at a sampling site.

5.1.2 Sample Collection Methods Summary

A SeaBird SBE "Sealogger" CTD unit was used to obtain a vertical profile of depth, dissolved oxygen, temperature and salinity at each station. Measurements were made from within a meter of the water surface to approximately a meter a meter above the sediment/water interface.

5.1.3 Sampling Start Date

June 1998

5.1.4 Sampling End Date

August 1998

5.1.5 Platform

Sampling was conducted from an USEPA vessel, the R/V CLEAN WATERS.

5.1.6 Sampling Gear

SeaBird model SBE 25 "Sealogger" CTD
NBS thermometer
Refractometer

5.1.7 Manufacturer of Sampling Equipment

Sea-Bird Electronics, Inc.

5.1.8 Key Variables

This data set contains surface and bottom values measured at the time of sampling.

5.1.9 Collection Method Calibration

NA

5.1.10 Sample Collection Quality Control

NA

5.1.11 Sample Collection Method Reference
Reifsteck, D.M., C.J. Strobel and D.J. Keith. 1993. Environmental Monitoring and Assessment Program - Near Coastal Component: 1993 Virginian Province Field Operations and Safety Manual. U.S. EPA NHEERL-AED. Narragansett, RI.

5.2 Data Preparation and Sample Processing
Not applicable

6. DATA MANIPULATIONS

6.1 Name of new or modified values
NA

6.2 Data Manipulation Description
NA

6.3 Data Manipulation Examples
NA

7. DATA DESCRIPTION

7.1 Description of Parameters

#	Parameter Name	Type	Data Len	Format	Parameter Label
1	STATION	Char	10	$10.	Station Identifier
2	DATE	Num	8	DATE7.	Date
3	SRF_SAL	Num	8	5.2	Surface Salinity (ppt)
4	SRF_TEMP	Num	8	5.2	Surface Temp (C)
5	SRF_OXY	Num	8	5.2	Surface DO (mg/L)
6	SECCHI	Num	8	3.1	Secchi depth (m)
7	BTM_OXY	Num	8	5.2	Bottom DO (mg/L)
8	BTM_SAL	Num	8	5.2	Bottom Salinity (ppt)
9	BTM_TEMP	Num	8	5.2	Bottom Temp (C)

7.1.6 Precision to which values are reported
The precision is indicated by the attribute format reported under 7.1

7.1.7 Minimum value in data set

SRF_SAL	0.7
SRF_TEMP	19.3
SRF_DO	2.2
SECCHI	0.25
BTM_DO	0.1
BTM_SAL	2.7
BTM_TEMP	11.3

7.1.8 Maximum value in Data Set

SRF_SAL	29
SRF_TEMP	27
SRF_DO	13.2
SECCHI	2.3
BTM_DO	11.9
BTM_SAL	30.8
BTM_TEMP	26.2

7.2 Data Record Example

7.2.1 Column Names for Example Records

Surface Data

STATION,DATE,SRF_SAL,SRF_TEMP,SRF_DO

Bottom data

STATION,DATE,SECCHI,BTM_SAL,BTM_TEMP,BTM_DO

7.2.2 Example Data Records

Surface Data

STATION,DATE,SRF_SAL,SRF_TEMP,SRF_DO
JB008,8/4/98,25.8,24.9,4.3
JB018,8/5/98,25.9,25.8,6.3
JB026,8/7/98,27,25,9.1

Bottom data

STATION,DATE,SECCHI,BTM_SAL,BTM_TEMP,BTM_DO
JB008,8/4/98,0.7,26.1,24.1,1.7
JB018,8/5/98,1,26.8,24,6.4
JB026,8/7/98,1,27,24.9,8.7

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude

-74 Degrees 17.4 Minutes 48.00 Decimal Seconds

8.2 Maximum Longitude

-73 Degrees 45 Minutes 0.54 Decimal Seconds

8.3 Minimum Latitude

40 Degrees 25.2 Minutes 36.00 Decimal Seconds

8.4 Maximum Latitude

40 Degrees 51.6 Minutes 42.00 Decimal Seconds

8.5 Name of area or region

New York/New Jersey Harbor System:
Four sub-basins were sampled in the New York/New Jersey Harbor, including: Upper Harbor, Newark Bay, Lower Harbor (includes Raritan and Sandy Hook Bays), and Jamaica Bay. For purposes of this study, the region includes the lower portions of the Hudson, Passaic, Harlem, Hackensack and Raritan Rivers, upstream to a near-bottom salinity of 15 ppt, the East River to Long Island Sound and Lower Harbor to the Atlantic Ocean.

9. QUALITY CONTROL AND QUALITY ASSURANCE

9.1 Data Quality Objectives

NA

9.2 Data Quality Assurance Procedures

NA

10. DATA ACCESS

10.1 Data Access Procedures

Data can be downloaded from the WWW server.

10.2 Data Access Restrictions

Data can only be accessed from the WWW server.

10.3 Data Access Contact Persons

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10.4 Data Set Format

comma delimited

10.5 Information Concerning Anonymous FTP

Data cannot be accessed via ftp.

10.6 Information Concerning WWW

Data can be downloaded from the WWW servers.

10.7 EMAP CD-ROM Containing the Data Set

Data are not available on CD-ROM

11. REFERENCES

Adams, D. 1998. Quality Assurance Project Plan for Environmental Monitoring, "A 5-year Revisit of Sediment Quality in the NY/NJ Harbor." U.S. Environmental Protection Agency, Region 2, Edison, NJ.

Adams, Darvene and Sandra Benyi. 2003. Final Report: Sediment Quality of the NY/NJ Harbor System - A 5-Year Revisit. EPA/902-R-03-002. USEPA-Region 2, Division of Science and Assessment. Edison, NJ. December, 2003.

Reifsteck, D.M., C.J. Strobel and D.J. Keith. 1993. Environmental Monitoring and Assessment Program - Near Coastal Component: 1993 Virginian Province Field Operations and Safety Manual. U.S. EPA NHEERL-AED. Narragansett, RI.

12. TABLE OF ACRONYMS

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